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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,390	07/05/2001	Dale Francis Obeshaw	H-199376	3506

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EXAMINER

MIGGINS, MICHAEL C

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 09/03/2003

110

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/899,390

Applicant(s)

OBESHAU, DALE FRANCIS

Examiner

Michael C. Miggins

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 15-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 30-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-32 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of group I, claims 1-14 and 30-32 in Paper No. 7 is acknowledged. The traversal is on the ground(s) that applicant's claimed product, a polygonal outer surface and a composite overwrap collar over the polygonal outer surface, cannot be made via rotational molding techniques. This is not found persuasive because as disclosed in the Swain reference (U.S. Patent Application Publication 2003/0013814 A1, provided herein) a rotomolded object can be made in a square mold (page 5, paragraph [0052]). Furthermore, said object can contain a mixture of polymers and fibers (page 3, paragraphs [0031] – [0032]). Steinberg et al. (U.S. Patent No. 4,548,779, provided herein) teach that rotational molding can be used to create multi-layered objects of two or more layers (column 2, lines 36-61 and column 8, lines 24-51). Thus it is clear that a rotational molding process can be used to make applicant's invention.

The requirement is still deemed proper and is therefore made FINAL.

2. This application contains claims 15-29 drawn to an invention nonelected with traverse in Paper No. 9. A complete reply to the final rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

WITHDRAWN REJECTIONS/OBJECTIONS

3. The claim objection to claim 14 set forth in paper #7, page 3, paragraph 7 is withdrawn. The 35 USC 112 rejections set forth in paper #7, pages 3-4, paragraphs 8-9

Art Unit: 1772

have been withdrawn. The double patenting rejections set forth in paper #7, pages 4-8, paragraphs 10-12 have been withdrawn. The 35 USC 102(b) and 103(a) rejections set forth in paper #7, pages 8-10, paragraphs 13-16 have been withdrawn.

Response to Arguments

4. Applicant's arguments with respect to claims 1-14 and 30-32 have been considered but are moot in view of the new ground(s) of rejection.

NEW REJECTIONS

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 10, 12 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 10 recites the limitation "that selected portion" in line 5. There is insufficient antecedent basis for this limitation in the claim. Since the claim never recites "... a selected portion ..." prior to line 5.

8. Claims 12 and 14 recite the limitation "the secondary loading condition" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 1-14 and 30-34 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over either claims 1-20 of copending Application No. 09/899,320, claims 1-20 of copending Application No. 09/668,429, claims 1-13, 15-41 of copending Application No. 09/704,228, claims 1-39 of copending Application No. 09/900,762, or claims 1-20 and 33-35 of copending Application No. 09/809,778 in view of Erwin et al. (U.S. Patent No. 3,755,037).

Claims 1-14 of copending Application No. 09/899,390, claims 1-20 of copending Application No. 09/668,429, claims 1-13, 15-41 of copending Application No. 09/704,228, claims 1-39 of copending Application No. 09/900,762, or claims 1-20 and 33-35 of copending Application No. 09/809,778 all recite a contoured structural member, comprising at least one contoured inner layer comprising a composite or material, at least one contoured outer layer comprising a composite material, wherein the structural member has a closed configuration, wherein the composite material is a

reinforced resin matrix material, wherein the reinforced resin matrix material comprises at least one prepreg ply, wherein both the at least one inner layer and the at least one outer layer comprise a composite material (applies to instant claims 1-3, 5, 10-14 and 30-34).

With regards to claims 30-32, claims 30-32 recite the same structures as are recited in independent claims 1, 10, 11 and 12 except for the limitation that a portion of an outer surface of the structural member has a polygonal shape. It has been found that even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Therefore any process limitations recited in claims 30-32 have been given little to no patentable weight. Moreover, any contoured structural member will read on claims 30-32 since all the other limitations in claims 30-32 are method steps which have been given little to no patentable weight.

Copending Application No. 09/899,390, copending Application No. 09/668,429, copending Application No. 09/704,228, copending Application No. 09/900,762, or copending Application No. 09/809,778 all recite applicant's invention substantially as claimed. However, none of the copending applications recite a contoured structural member wherein a portion of an outer surface of the structural member has a polygonal

Art Unit: 1772

shape, wherein the interior region is hollow, partially filled or completely filled, wherein the prepreg material comprises a plurality of layers, wherein the plurality of layers have a plurality of fibers with an orientation ranging from 0 to about 90 degrees and further comprising an over wrap on a portion, or only on the polygonal portion of the outer surface of the structural member.

Erwin et al. teach a contoured structural member (abstract, see also Fig. 1) wherein a portion of an outer surface of the structural member has a polygonal shape (see 12 from Fig. 1, since only the handle is hexagonal), wherein the interior region is hollow, partially filled or completely filled (see Fig. 2 and column 2, lines 63 through column 3, line 9), wherein a prepreg material (teaches prepreg column 4, lines 12-15) comprises a plurality of layers (column 3, lines 10-25), wherein the plurality of layers have a plurality of fibers with an orientation ranging from 0 to about 90 degrees (column 3, lines 10-30) and further comprising an over wrap on a portion, or only on the polygonal portion of the outer surface of the structural member (since additional reinforcing strips are laid on the handle section, see column 4, lines 10-17) (applies to instant claims 1, 4, 6-9, 10-11 and 13, 33-34) for the purpose of providing low weight and cost, high strength and modulus of elasticity.

Therefore it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to have provided an outer surface of the structural member has a polygonal shape, wherein the interior region is hollow, partially filled or completely filled, wherein the prepreg material comprises a plurality of layers, wherein the plurality of layers have a plurality of fibers with an orientation ranging from 0 to

Art Unit: 1772

about 90 degrees and further comprising an over wrap on a portion, or only on the polygonal portion of the outer surface of the structural member in the contoured structural members recited in Copending Application No. 09/899,390, copending Application No. 09/668,429, copending Application No. 09/704,228, copending Application No. 09/900,762, or copending Application No. 09/809,778 in order to provide improved durability as taught or suggested by Erwin et al..

11. Claim 8 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over either claims 1-20 of copending Application No. 09/899,320, claims 1-20 of copending Application No. 09/668,429, claims 1-13, 15-41 of copending Application No. 09/704,228, claims 1-39 of copending Application No. 09/900,762, or claims 1-20 and 33-35 of copending Application No. 09/809,778 in view of Erwin et al. (U.S. Patent No. 3,755,037), as applied to claims 1-14 and 30-32 above, and further in view of Reid et al..

Copending Application No. 09/899,390, copending Application No. 09/668,429, copending Application No. 09/704,228, copending Application No. 09/900,762, or copending Application No. 09/809,778 all recite applicant's invention substantially as claimed. However, none of the copending applications recite a contoured structural member, wherein the structural member has at least one end with the at the at least one initiator not located near the at least one end.

Read et al. teach a contoured structural tube (abstract, Figs. 2a and 2b), wherein the structural member has at least one end with the at the at least one initiator not

Art Unit: 1772

located near the at least one end (18 from Fig. 3a) for the purpose of providing reduced crush initiation forces in composite tubes for absorption of impact energy.

Therefore it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have provided at least one end with the at the at least one initiator not located near the at least one end in the contoured structural member of the copending applications in order to provide reduced crush initiation forces in composite tubes for absorption of impact energy as taught or suggest by Reid et al..

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1-7, 9-14 and 30-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Erwin et al. (U.S. Patent No. 3,755,037).

Erwin et al. teach a contoured structural member (see Fig. 1, since the racket is contoured), comprising at least one contoured inner layer comprising a composite material (column 2, line 63 through column 3, line 25), at least one contoured outer layer comprising a composite material (column 2, line 63 through column 3, line 25) and wherein a portion of the outer surface of the structural member has a polygonal shape (see 12 from Fig. 1, since only the handle 12 has a polygonal or hexagonal shape), wherein the structural member has a closed configuration (see Fig. 1), an interior region

Art Unit: 1772

defined by an inner surface of the at least one inner layer, wherein the interior region is hollow, partially filled, or completely filled (column 2, line 63 through column 3, line 25), wherein the at least one of the composite materials is formed from a prepreg material (column 4, lines 19-23), wherein the prepreg material comprises a plurality of layers (column 3, lines 10-25 and column 4, lines 19-23), wherein the plurality of layers have a plurality of fibers with an orientation ranging from 0 to 90 degrees (column 3, lines 10-30), an overwrap on a portion of the outer surface of the structural member (since additional reinforcing strips are laid on the handle section, see column 4, lines 10-17) (applies to instant claims 1-7, 9-14 and 30-34).

With regards to claims 30-32, claims 30-32 recite the same structures as are recited in independent claims 1, 10, 11 and 12. It has been found that even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Therefore any process limitations recited in claims 30-32 have been given little to no patentable weight. Moreover, any contoured structural member will read on claims 30-32 since all the other limitations in claims 30-32 are method steps which have been given little to no patentable weight.

Claims 12 and 14 recite intended use (i.e. "... wherein the overwrap collar reduces the secondary loading condition ...") and has been given little too no patentable

Art Unit: 1772

weight since it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Erwin et al. (U.S. Patent No. 3,755,037) in view of Reid et al..

Erwin et al. disclose applicant's invention substantially as claimed. However, Erwin et al. fail to disclose a contoured structural member, wherein the structural member has at least one end with the at the at least one initiator not located near the at least one end.

Reid et al. teach a contoured structural tube (abstract, Figs. 2a and 2b), wherein the structural member has at least one end with the at the at least one initiator not located near the at least one end (18 from Fig. 3a) for the purpose of providing reduced crush initiation forces in composite tubes for absorption of impact energy.

Therefore it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have provided at least one end with the at the at least one initiator not located near the at least one end in the contoured structural member of Quigley et al. in order to provide reduced crush initiation forces in composite tubes for absorption of impact energy as taught or suggest by Reid et al..

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Miggins whose telephone number is (703) 305-0915. The examiner can normally be reached on Monday-Friday; 1:30-10:00 PM.

Art Unit: 1772

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pyon Harold can be reached on (703) 308-4251. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

MCM *del*
August 21, 2003

Harold Pyon
HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

8/22/03